DOCUMENT RESUME

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TITLE	Inductive Strategies (Module No. I:D-2 of the series, "Competency-Based Teacher Education.") Description of Teacher Inservice Education Materials.
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ABSTRACT

The learning module described deals with the teaching of the skill of conceptualization through the development of categories. Included are exercises at defining and identifying concepts, concept formation and attainment, comparing and contrasting meanings of "statement of values, face and concept" along with others. Included in this descriptive report is an outline of the module's content, activities and resources involved in using the module, and ordering information. A critique of the module is included. (JD)

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DESCRIPTION OF TEACHER INSERVICE EDUCATION MATERIALS

SUMMARY INFORMATION

Title: INDUCTIVE STRATEGIES (Module No. I:D-2 of the series, "Competency-Based Teacher Education")

Publication Date(s): 1972; revised 1973

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

Intended Users: Preservice and inservice teachers interested in acquiring skills which should contribute to an improved overall teaching style

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Grade Level(s): Middle and secondary school

Number: Individual or group

Primary Focus: It is the intent of this module to suggest methods by which teachers may help students to develop the ability to conceptualize, as well as to develop understanding of the process of concept attainment.

School subject(s) and/or inservice topic(s) covered:

This module deals with the teaching of the skill of conceptualization through the development of categories. This is to be achieved through inferences based on the observed properties of an object, as well as through additional inferences about unobserved properties. Included are exercises at defining and identifying concepts, concept formation and attainment, comparing and contrasting meanings of "statement of values, face and concept" along with others.

What participant does in using the materials:

The user reads the objectives, takes the pretest, reads the rationale, selects an instructional objective, and takes the posttest. As a demonstration of acquired skill, the user performs what is referred to as a "Teach" and is evaluated by other members of the group, by the instructor, or self-evaluated from a videotape recording of his/her performance. If the user passes the pretest, there is no need to continue through the other steps.

Resources:

Needed for program implementation are: one 26-page booklet, entitled "Inductive Strategies"; a group of peers who will participate in discussion of the material and evaluate one another's teaching demonstrations; a module director who will lead discussions, organize the program and evaluate participants. A videotape machine is needed if the participant chooses to self-evaluate, or in the case where an individual undertakes the module alone. Approximate time needed for program completion is ten hours.

Describer critique:

The scope and complexity of the subject matter may make the use of the additional resources suggested in the back of the book necessary. The omission of a table of contents makes reference to specific sections of the module difficult. Overall the product is effective in familiarizing users with conceptualization processes, and methods of using it for improving classroom instruction.

SP013 964

1.0 PURPOSES:

Rationale

The principle of competency-based education implies that certain needs are identified by those associated in some degree with teacher effectiveness; objectives are set, means to achieve those objectives are developed, and ways in which the learning that takes place may be measured are supplied. The nine modules in this package follow this pattern, and are designed to enhance the instructional strategies and professional competence of teachers.

Goals

The goals of this module are:

- To enable teachers to help students to conceptualize effectively, and

- to develop a teacher's awareness of the process of concept attainment.

Objectives

The objectives of this module are to enable learners to demonstrate an understanding of the concept attainment strategy by:

- Using a topic of choice to develop a lesson designed to teach a concept, and

- implementing the lesson in a Teach.

2.0 CONTENT — Scope and Sequencing of Topics:

Scope

The scope of this module can be understood through the intent of the enabling objectives:

1. Define the term "concept;"

2. Identify and describe two types of concepts;

3. Define concept formation and concept attainment;

4. Compare and contrast the meanings of "statement of values, face, and concept;"

5. List five kinds of examples and describe each; and

6. List each step in the concept attainment strategy and describe it.

The pre-assessment requires that the learner develop and implement a lesson designed to teach a concept.

Sequence

A sequence is suggested in the instructions for completing the various elements in each module, and should be followed.

3.0 ACTIVITIES AND RESOURCES INVOLVED IN USE OF PRODUCT

3.1 Description of main inservice activities:

Most of the instructional modules (IM) utilized in the University of Texas at El Paso Teacher Education program follow a similar format: specific instructions are included in each IM. The user reads the objectives, takes the pretest, reads the rationale, selects an instructional alternative, and takes the posttest. If the user passes the pretest, there is no need to continue through the other steps. If the user fails the posttest, it will be necessary for him/her to recycle and select another instructional alternative.

3.2 Help given in use of product:

The instructions given for task performance are self-explanatory. There are study questions along the way which are helpful and lead to the implementation of the Teach. There is also a concept attainment evaluation form provided, which is to be used by peers assessing the learner's Teach.

4.0 EVALUATION OF TEACHER INSERVICE LEARNING

Each of the nine modules in this series has a pretest and a posttest which permit the participant to evaluate his/her inservice learning. The posttest for this module is comprised of a teaching performance (Teach) which is evaluated by other participants and/or the program instructor.

5.0 ORDERING INFORMATION

5.1 Resources required/recommended for implementing product:

Needed for program implementation are: one 26-page booklet, entitled "Inductive Strategies"; a group of peers who will participate in discussion of the material and evaluate one another's teaching demonstrations; a module director who will lead discussions, organize the program and evaluate participants. A videotape machine is needed if the participant chooses to self-evaluate, or in the case where an individual undertakes the module alone. Approximate time needed for program completion is ten hours.

Also suggested for use with the program are a book by Jerome Bruner, titled The Study of Thinking and a slide/tape, titled "Teaching Concepts."

5.2 Distributor name/address:

College of Education
The University of Texas at El Paso
El Paso, Texas 79968

Dr. Phyllis K. Benson
Director, Learning Resource Center
(915) 747-5562

5.3 Components/approximate costs:

Component	Purchase	Rental	No. Req.	Reusable
CBTE Series of Nine Modules	Total $18.00	no	1/participant	yes
INDUCTIVE STRATEGIES				
Module No. I:D-2 of the Competency Based Teacher Education Series	$ 2.00	no	1/participant	yes
OTHER MODULES				
I:D-1 "Instructional Strategies"	2.00	no	1/participant	yes
I:D-3 "Deductive Strategies"	2.00	no	1/participant	yes
I:D-4 "Instructional Modules: What They Are	2.00	no	1/participant	yes
I:D-5 "Individualizing Instruction"	2.00	no	1/participant	yes
I:D-6 "Tutoring"	2.00	no	1/participant	yes
I:D-7 "The Open Classroom Concept"	2.00	no	1/participant	yes
I:D-8 not included				
I:D-9 "Use of Community Resources"	2.00	no	1/participant	yes
I:D-10 "Programmed Instruction"	2.00	no	1/participant	yes

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6.0 HISTORY OF DEVELOPMENT

6.1 Identification of the developer:

This module was developed by Ms. Norma Hernandez, Dean of the College of Education, the University of Texas at El Paso.

6.2 How developed and when:

This product was field tested on the campus of the University of Texas at El Paso both with inservice teachers taking courses and with preservice undergraduate students doing their practicum. Some of the exercises were simulated with peers. In most cases the modules were revised one year after their original development, based on feedback from the field.

6.3 Evidence of effectiveness with users:

As part of the development of the product, revisions were made one year after its initial publication.

Since the time of those revisions, no formal instrument designed to measure effectiveness with users has been forthcoming, nor is such information available.

DESCRIBER CRITIQUE

Appropriateness / adaptability / technical quality:

Considering its brevity, this module is quite comprehensive and covers a great deal of material. For teachers not overly familiar with the concepts of inductive strategies, the suggested additional resources would prove helpful. This module would be most appropriate for inservice use by content teachers in secondary schools. The technical quality of this material is adequate; it is mimeographed and spiral-bound.

Content accuracy/social fairness/community acceptance issues:

No ethnic bias should be inferred from the material nor is the question of content controversy applicable here. No sex bias seems intended, but the user is referred to in the masculine gender throughout the module.

Overall summary/comment:

The lack of a table of contents or cross reference of any kind makes use of this module difficult. This is an unfortunate oversight which detracts from the effectiveness of the module. Also, the scope of this material is broad and complex and may require the additional resources suggested by the developer for full understanding of the concepts. However, considering the booklet's brevity, it does cover quite a bit of material and should allow users to achieve the goals and objectives it states at the outset.

LB-9/77